

## RJM Corporation

### Burner Upgrades for Low NOx and Low LOI Operation

RJM has developed several products and services to enable your existing burners to perform like brand new low NOx burners. Sophisticated diagnostic and computer modeling techniques and patented and proprietary components ensure successful NOx reduction at a cost much less than brand new burners.

RJM's burner upgrade is designed to optimize performance, lower NOx and minimize impact on LOI. The burner upgrade program consists of an air distribution analysis, computer modeling, flame stabilizers, coal spreaders and coal distribution discs. This custom design and attention to detail ensures a minimum impact on flyash LOI. On more than one occasion LOI has actually been improved by the burner upgrade.

RJM has successfully applied these techniques and components to older, original design burners and other Vendor's new low NOx burners. The non traditional economics of NOx and the traditional economics of LOI make this program very cost effective on almost all original burners and many new low NOx burners.

RJM's breakthrough burner upgrade components circumferentially and radially stage your existing burners to achieve low NOx performance. The installed cost is substantially lower than brand new replacement low NOx burners.

### 75% NOx Reduction with Burner Upgrades and SNCR

RJM is a supplier of urea based Selective Non Catalytic Reduction (SNCR) Systems. These systems include injection equipment, control hardware and software to adjust the process to meet load changes, and modular equipment for storing, mixing, metering and pumping the urea. RJM successfully installed (5) SNCR systems in 1999.

RJM's unique ability to look at NOx reduction from the pulverizer forward ensures maximum NOx reductions. RJM supplies low NOx burner upgrades for coal, gas and oil burners, over fire air (OFA) systems, and is an expert at balancing air and fuel flow. This expertise, when combined with a back end system like SNCR, allows for the maximum unit NOx reduction.

By working from the pulverizer forward, RJM has achieved a 75% reduction in NOx emissions, from 0.1 to 0.25 lb/mmbtu, on a front fired pulverized coal boiler.

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